



## Market Rule Amendment Submission

This form is used to request an amendment to, or clarification of, the *Market Rules*. Please complete the first four parts of this form and submit the completed form by email or fax to the following:

Email Address: [Rule.Amendments@ieso.ca](mailto:Rule.Amendments@ieso.ca)

Fax No.: (416) 506-2847 Attention: Market Rules Group

**Subject: Market Rule Amendment Submission**

All information submitted in this process will be used by the *IESO* solely in support of its obligations under the *Electricity Act, 1998*, the *Ontario Energy Board Act, 1998*, the *Market Rules* and associated policies, standards and procedures and its licence. All submitted information will be assigned the *confidentiality classification* of “Public” upon receipt. You should be aware that the *IESO* will *publish this amendment submission* if the *Technical Panel* determines it warrants consideration and may invite public comment.

Terms and acronyms used in this Form that are italicized have the meanings ascribed thereto in Chapter 11 of the *Market Rules*.

### PART 1 – SUBMITTER’S INFORMATION

Please enter contact information in full.	
Name: <u>IESO Staff</u>	
(if applicable) <i>Market Participant / Metering Service Provider</i> No. <sup>1</sup> : <u>N/A</u>	<i>Market Participant Class</i> : <u>N/A</u>
Telephone: <u>905-403-6955</u>	Fax: _____
E-mail Address: <u>rule.amendments@ieso.ca</u>	

### PART 2 – MARKET RULE AMENDMENT SUBMISSION INFORMATION

Subject: <u>Operating Reserve</u>	
Title: <u>Permitting Dispatchable Load Facilities to Supply Synchronized 10-Minute Operating Reserve</u>	
Nature of Request (please indicate with x)	
<input checked="" type="checkbox"/> Alteration	<input type="checkbox"/> Deletion
<input type="checkbox"/> Addition	<input type="checkbox"/> Clarification
Chapter: <u>5</u>	Appendix: _____ Sections: <u>4.5.12</u>
Sub-sections proposed for amending/clarifying: _____	

<sup>1</sup> This number is a maximum of 12 characters and does not include any spaces or underscore.

### PART 3 – DESCRIPTION OF THE ISSUE

Provide a brief description of the issue and reason for the proposed amendment. If possible, provide a qualitative and quantitative assessment of the impacts of the issue on you and the *IESO-administered markets*. Include the Chapter and Section number of the relevant *market rules*.

The IESO is responsible for maintaining the reliability of Ontario’s integrated power system in accordance with all applicable reliability standards, including those established by the Northeast Power Coordinating Council (NPCC) Inc. These standards are referenced in the market rules that govern the operation of the electricity marketplace and integrated power system.

On July 17, 2007 NPCC approved a modification to its existing reliability standards to allow dispatchable/interruptible load facilities to provide synchronized operating reserve. The NPCC Task Force on Coordination of Operation (TFCO) has investigated the potential use of dispatchable/interruptible load facilities providing synchronized reserve in response to requests from loads within NPCC to consider revisions to the existing definition of synchronized reserve that would allow their participation. Furthermore, with the approval of the new standard, dispatchable loads in Ontario that meet the technical and registration requirements should be provided the opportunity to offer this category of operating reserve so as to not contravene the purposes of the *Electricity Act, 1998*.

Those purposes are as follows:

- “to provide generators, retailers, and consumers with non-discriminatory access to transmission and distribution systems in Ontario”.

One of the guiding principles of the design of the Ontario market is fairness. The market should provide for open non-discriminatory access by all who meet reasonable publicly stated prudential and technical standards. There should be no artificial barriers to entry or exit. This principle is reflected in subsections 339) and 35(6) of the *Electricity Act, 1998*, which provide that a market rule should not unjustly discriminate against or in favour of a market participant or class of market participants. The Ontario Energy Board confirmed in its recent decision on the 3x ramp rate that unjust discrimination in the context of the *Act* “means unjust economic discrimination”. The TFCO concluded that allowing loads to supply the synchronized portion of the 10-minute reserve requirement would not have a detrimental impact on the reliability of the Eastern Interconnection. For further information please refer to the TFCO Position Paper on the Use of Load as Synchronized Reserve. (IESOTP 204-3c).

In light of the TFCO analysis the current market rule precluding dispatchable loads from providing 10-minute synchronized operating reserve could contravene the IESO’s obligation not to unjustly discriminate against a market participant or a class of market participants. As described above dispatchable loads that meet the technical and registration requirements should be provided equal, non-discriminatory access to participate in IESO-administered markets.

To date, no other market fully integrates load dispatch quite to the extent that exists in IESO-administered markets. For example, PJM does allow loads to supply OR, however, there is no requirement in PJM for the purchase of 10-minute synchronized OR.

The historical reliability standards and existing market rules only allow generation facilities and generation facilities operating in pump mode, to provide synchronized operating reserve. Generators provide capability such as inertial response, governor response and voltage control that, while not specifically part of the reserve requirement, were seen as benefits to grid operation that load facilities can’t provide.

**PART 3 – DESCRIPTION OF THE ISSUE**

The former standard was contained within the NPCC Glossary of Terms Document A-7 - NPCC Specific Definitions:

**Synchronized Reserve** — The unused portion of generating capacity which is synchronized to the system and ready to pick up **load** to claimed capacity and capacity which can be made available by curtailing pumping hydro units. (A-6, C-1)

The existing market rules are consistent with the former standard. Sections 4.5.9 and 4.5.12 of chapter 5 states:

4.5.9 *Ten-minute operating reserve* shall be synchronised with the *IESO-controlled grid* to the extent required by all applicable *reliability standards*.

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4.5.12 *A registered facility that is a dispatchable load or boundary entity that is used as ten-minute operating reserve* shall be treated as *operating reserve* that is non-synchronised with *the IESO-controlled grid*.

Currently there are 676 MW of dispatchable load registered in the IESO-administered markets. It is likely that not all current and future dispatchable loads would be eligible to participate in the provision of 10 minute synchronized reserve (10S). For example, NPCC has specified that load facilities using a non synchronized generator to reduce load are not eligible to provide synchronized reserve. Also the current 10 minute Non-Spin and 30 minute reserve registration requirements for dispatchable load are likely to be different than the registration requirements for 10S. Not all loads may be able to meet these 10S requirements.

For dispatchable loads that are eligible and wish to participate, there will be a need for the IESO to review their submitted registration information. This is not expected to be an onerous or lengthy process because existing dispatchable loads providing operating reserve will not require any new equipment installations. Loads which are not currently dispatchable would likely have to make additional investments to become eligible to be dispatchable, including the provision of all classes of operating reserve. These requirements for conversion from non-dispatchable to dispatchable is no more onerous due to the additional market opportunity of 10S.

**PART 4 – PROPOSAL (BY SUBMITTER)**

Provide your proposed amendment. If possible, provide suggested wording of proposed amendment.

It is proposed to revise section 4.5.12 of Chapter 5 by deleting the reference to dispatchable loads.

**PART 5 – FOR IESO USE ONLY**

*Technical Panel Decision on Rule Amendment Submission:* Warrants Consideration

MR Number: MR-00330

Date Submitted to *Technical Panel*: August 22, 2007

Accepted by *Technical Panel* as: (please indicate with x)

Date:

General       Urgent       Minor

August 28, 2007

Criteria for Acceptance: The amendment submission identifies means to better enable the market to satisfy the market design principles of fairness and reliability.

Fairness

One of the guiding principles of the design of the Ontario market is fairness. The market should provide for open non-discriminatory access by all who meet reasonable publicly stated prudential and technical standards. There should be no artificial barriers to entry or exit. This principle is reflected in subsections 33(9) and 35(6) of the *Electricity Act, 1998*, which provide that a market rule should not unjustly discriminate against or in favour of a market participant or class of market participants.

The Ontario Energy Board confirmed in its recent decision on the 3x ramp rate that unjust discrimination in the context of the *Act* “means unjust economic discrimination”. In light of the analysis undertaken by the NPCC Task Force on Coordination of Operation (TFCO), which concluded that replacing generator reserve with interruptible load will have a minimal impact on system frequency regulation, the current rule precluding dispatchable loads from providing 10-minute synchronized operating reserve could contravene the IESO’s obligation not to unjustly discriminate against a market participant or class of market participants. As described above dispatchable loads that meet the technical and registration requirements should be provided equal, non-discriminatory access to participate in IESO-administered markets.

Reliability

Permitting dispatchable loads to provide this category of operating reserve is expected to enhance the reliability of Ontario’s reliability system by allowing additional suppliers of synchronized operating reserve.

Priority: Medium

**PART 5 – FOR IESO USE ONLY**

Criteria for Assigning Priority:

A medium priority represents a balance of the following considerations:

1. Technical feasibility: The IESO is currently assessing the technical implementation timelines necessary to facilitate this market rule amendment submission. Changes to market systems will be necessary before any dispatchable load offer of 10-minute synchronized operating reserve can be processed by the IESO. The timing of the required changes is not known.
2. Pervasiveness: expected improvements in reliability would benefit all market participants.

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Not Accepted (please indicate with x):

Clarification/Interpretation Required (please indicate with x):

Technical Panel Minutes Reference: IESOTP 205-1

Technical Panel Comments: None